

Art Unit: 1797

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Claim 1 has been amended as follows: --

1.(Currently Amended) A method of separating met-SWNTs from sem-SWNTs, the method comprising:

suspending a population of functionalized SWNTs in a suspending solvent, and

employing a means for inducing selective precipitation without adsorption to a template, wherein selective precipitation comprises precipitating a majority of the met-SWNTs while leaving a population of the sem-SWNTs in -- the -- suspension, or precipitating a majority of the sem-SWNTs while leaving a population of the met-SWNTs in -- the -- suspension.

-- .

Art Unit: 1797

Claim 14 has been amended as follows: --

14. (Currently Amended) A method for selective extraction of sem-SWNTs from a mixture of *sem-SWNTs* and *met-SWNTs*, comprising-- : --

contacting a population of non-acid functionalized SWNTs with ~~an~~ -- a --
-- surfactant amine -- in a suspending solvent -- , to form a population of
surfactant amine functionalized *sem-SWNTs* and

extracting the population of surfactant amine functionalized *sem-SWNTs* with a means for solvent extraction while leaving a majority of the
met-SWNT behind -- in the suspension -- without adsorption to a template.

-- .

Art Unit: 1797

Claim 19 has been amended as follows: --

19. (Currently Amended) A method of separating *sem-SWNTs* or *met-SWNTs* by diameter to form a diameter-separated population of *sem-SWNTs* or *met-SWNTs*, comprising-- : --

suspending an enriched population of functionalized *sem-SWNTs* or an enriched population of functionalized *met-SWNTs* in a suspending solvent to form a functionalized *sem-SWNT* suspension or a functionalized *met-SWNT* suspension, and

employing a means for selectively precipitating according to diameter the functionalized *sem-SWNTs* or functionalized *met-SWNTs* -- **from the suspension**-- without adsorption to a template,

wherein the enriched population of functionalized *sem-SWNTs* comprises greater than or equal to about 66 wt% *sem-SWNTs* or the enriched population of functionalized *met-SWNTs* comprises greater than or equal to about 66 wt% *met-SWNTs*. -- .

Authorization for this examiner's amendment was given in a telephone interview with Ian Lodovice on November 25, 2008.

Art Unit: 1797

The following is an examiner's statement of reasons for allowance: Claims 1, 14 and 19 all are now deemed to distinguish over the applied prior art of record primarily for reasons of record, including the arguments presented in the Remarks of 9/29/2008 and 2/12/2008 and the Declarations filed under 37 USC 1.131 on 12/12/2005, swearing back of formerly applied Smalley et al references. The changes made to claims 1,14 and 19 are supported at Paragraphs 26-29 of the Specification regarding the suspension associated with the selective precipitation having direct nexus with the suspending solvent employed to suspend functionalized SWNTs, and were made to both mitigate possible newly considered 112, 2nd paragraph rejections concerning clarity and nexus between method steps and to also better distinguish over the body of prior art generally.

The Arguments directed to the former 112, 1st paragraph rejection are persuasive concerning implicit support in the Specification for "without adsorption to a template", especially upon reconsideration of the teachings of paragraph 27 of the Specification, concerning a plethora of selective precipitation techniques that may be employed which would be inherently unlikely to be associated with use of any form of sorption, much less sorption using a template. Such paragraph 27 is directed to selective precipitation induced by adding of solvents, non-solvents, reducing and/or oxidizing mediums, changing of temperature of the suspension, etc.

Art Unit: 1797

The claims, especially as amended are now deemed to clearly distinguish over a possible combination of the Schleier-Smith and Haddon patents of record in view of additional tertiary prior art, represented by newly cited Japanese publication 08-231210 (Hidefumi) in view of respective recitations added by Examiners Amendment concerning the “means for selective precipitation... being from “the suspension” (referring back to the suspending solvent employed in the functionalization). For instance, in Hidefumi, a plurality of selective precipitation steps to separate met-SWNTs from sem-SWNTs involved with chromatography, centrifugal and membrane separation are employed; however no precipitation from a suspension associated with functionalization of SWNTs is suggested.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

JWD

11/25/2008

/Joseph W. Drodge/

Primary Examiner, Art Unit 1797